Title (en)

CODED APERTURE BEAM ANALYSIS METHOD AND APPARATUS

Title (de)

STRAHLANALYSEVERFAHREN MIT CODIERTER APERTUR UND VORRICHTUNG

Title (fr)

PROCÉDÉ ET APPAREIL D'ANALYSE D'UN FAISCEAU À OUVERTURE CODÉE

Publication

EP 2798370 A4 20150923 (EN)

Application

EP 12872244 A 20121221

Priority

• US 201161580997 P 20111228
• US 201213490607 A 20120607
• US 2012071501 W 20121221

Abstract (en)

[origin: US2013169471A1] A method and apparatus for determining the range, radial velocity, and bearing angles of scattering objects reflecting RF signals or for determining the range, radial velocity, and bearing angles of sources RF signals. An array of antenna elements is utilized, the array of antenna elements each having an associated two state modulator wherein transmitted and/or received energy is phase encoded according to a sequence of multibit codes, the multibit codes each having two states with approximately a 50% probability for each of the two states occurring in each given multibit code in said sequence of multibit codes, thereby allowing the determination of range, radial velocity, and bearing angles through digital computation after the scattered signals have been received.

IPC 8 full level

G01S 7/285 (2006.01); G01S 3/46 (2006.01); G01S 3/48 (2006.01); G01S 7/32 (2006.01); G01S 7/35 (2006.01); G01S 13/02 (2006.01); G01S 13/34 (2006.01); G01S 13/42 (2006.01); G01S 13/58 (2006.01); G01S 13/66 (2006.01); H01Q 21/00 (2006.01)

CPC (source: EP US)

G01S 3/46 (2013.01 - EP US); G01S 7/352 (2013.01 - EP US); G01S 13/343 (2013.01 - EP US); G01S 13/426 (2013.01 - EP US); G01S 13/66 (2013.01 - EP US); G01S 3/48 (2013.01 - EP US); G01S 13/584 (2013.01 - EP US); G01S 2013/0245 (2013.01 - EP US)

Citation (search report)

• [XI] US 7151478 B1 20061219 - ADAMS VINH N [US], et al
• [A] US 3852753 A 19741203 - BLAKEMORE T
• [A] US 2008129595 A1 20080605 - CHOI CHANG W [US], et al
• See references of WO 2013141924A2

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

US 2013169471 A1 20130704; EP 2798370 A2 20141105; EP 2798370 A4 20150923; EP 2798370 B1 20200506

DOCDB simple family (application)

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